AMENDMENTS TO THE CLAIMS

Please cancel Claims 12 and 27; and amend Claims 1-4, 8-11, 13-15, 17-19, 23-26, 28, 29, 38, and 41-43 as follows.

Listing Of Claims

1. (currently amended) An apparatus comprising:

a housing;

a first disc rotatably disposed with respect to said housing, said first disc defining a first and a second slot;

a second disc rotatably disposed with respect to said housing; [[and]]

a first pin mounted to said second disc;

a third disc rotatably disposed with respect to said housing, said first disc being disposed between said second and third discs; and

a second pin mounted to said third disc;

wherein rotation of said first [[and]], second and third discs with respect to said housing causes said first pin to engage said first slot to define a first compression chamber between said first pin and said first disc[[.]] and said second pin to engage said second slot to define a second compression chamber between said second pin and said first disc.

2. (currently amended) The apparatus according to Claim 1 further comprising:

a first trap plate disposed on a first side of said first disc; and

a second trap plate disposed on a second side of said first disc, said first and second trap plates sealing said first and second compression ~~chamber~~ chambers when said first pin engages said first slot[[.]] and said second pin engages said second slot.

3. (currently amended) The apparatus according to Claim 1 wherein said first disc defines a tunnel in communication with said first and second slot.

4. (currently amended) The apparatus according to Claim 3 further comprising a single fuel injector disposed within said tunnel.

5. (original) The apparatus according to Claim 4 wherein said fuel injector is disposed along an axis of rotation of said first disc.

6. (original) The apparatus according to Claim 4 wherein said injector is rotatably disposed with respect to said first disc.

7. (original) The apparatus according to Claim 4 wherein said fuel injector is movable between a first position and a second position, said fuel injector spraying fuel to a first location when in said first position, said fuel injector spraying fuel to a second location when in said second position, said second position being different than said first position.

8. (currently amended) The apparatus according to Claim 4 further

comprising a single spark initiator in communication with said first and second combustion ~~chamber~~ chambers.

9. (currently amended) The apparatus according to Claim 1 further comprising a single fuel injector in simultaneous communication with said first and second combustion ~~chamber~~ chambers.

10. (currently amended) The apparatus according to Claim 9 further comprising a first spark initiator in communication with said first combustion chamber[[.]] and a second spark initiator in communication with said second combustion chamber.

11. (currently amended) The apparatus according to Claim 1 further comprising a first spark initiator in communication with said first combustion chamber[[.]] and a second spark initiator in communication with said second combustion chamber.

12. (cancelled)

13. (currently amended) The apparatus according to Claim [[12]] 1 wherein said first and second pins each comprise a porous metal pin.

14. (currently amended) The apparatus according to Claim 1 wherein said first ~~pin comprises a porous metal pin.~~ compression chamber is in communication with second compression chamber.

15. (currently amended) An apparatus comprising:

a housing;

a first disc rotatably disposed with respect to said housing, said first disc defining a first [[and]], a second, a third and a fourth slot;

a second disc rotatably disposed with respect to said housing; [[and]]

a first and second pin mounted to said second disc;

a third disc rotatably disposed with respect to said housing, said first disc being disposed between said second and third discs; and

a third and fourth pin mounted to said third disc;

wherein rotation of said first [[and]], second and third discs with respect to said housing causes said first pin to engage said first slot to define a first compression chamber between said first pin and said first disc, [[and]] said second pin to engage said second slot to define a second compression chamber between said second pin and said first disc[[.]], said third pin to engage said third slot to define a third compression chamber between said third pin and said first disc and said fourth pin to engage said fourth slot to define a fourth compression chamber between said fourth pin and said first disc.

16. (original) The apparatus according to Claim 15 wherein said first and second slots are disposed opposite to each other.

17. (currently amended) The apparatus according to Claim 15 further

comprising:

a first trap plate disposed on a first side of said first disc; and

a second trap plate disposed on a second side of said first disc, said first and second trap plates sealing said first compression chamber when said first pin engages said first slot, [[and]] sealing said second compression chamber when said second pin engages said second slot[[.]] sealing said third compression chamber when said third pin engages said third slot and sealing said fourth compression chamber when said fourth pin engages said fourth slot.

18. (currently amended) The apparatus according to Claim 15 wherein said first disc defines a first tunnel in communication with said first and ~~second~~ third slots[[.]] and a second tunnel in communication with said second and fourth slots.

19. (currently amended) The apparatus according to Claim 18 further comprising a single fuel injector disposed within said ~~tunnel~~ first and second tunnels.

20. (original) The apparatus according to Claim 19 wherein said fuel injector is disposed along an axis of rotation of said first disc.

21. (original) The apparatus according to Claim 19 wherein said injector is rotatably disposed with respect to said first disc.

22. (original) The apparatus according to Claim 19 wherein said fuel injector

is movable between a first position and a second position, said fuel injector spraying fuel to a first location when in said first position, said fuel injector spraying fuel to a second location when in said second position, said second position being different than said first position.

23. (currently amended) The apparatus according to Claim 19 further comprising a first spark initiator in communication with said first compression chamber [[and]], a second spark initiator in communication with said second compression chamber[[.]], a third spark initiator in communication with said third compression chamber and a fourth spark initiator in communication with said fourth compression chamber.

24. (currently amended) The apparatus according to Claim 15 further comprising a single fuel injector in communication with said first and second combustion ~~chamber~~ chambers.

25. (currently amended) The apparatus according to Claim 24 further comprising a first spark initiator in communication with said first compression chamber [[and]], a second spark initiator in communication with said second compression chamber[[.]], a third spark initiator in communication with said third compression chamber and a fourth spark initiator in communication with said fourth compression chamber.

26. (currently amended) The apparatus according to Claim 15 further comprising a first spark initiator in communication with said first compression chamber [[and]], a second spark initiator in communication with said second compression chamber[[.]], a third spark initiator in communication with said third compression chamber and a fourth spark initiator in communication with said fourth compression chamber.

27. (cancelled)

28. (currently amended) The apparatus according to Claim [[27]] 15 wherein each of said first through fourth pins comprises a porous metal pin.

29. (currently amended) The apparatus according to Claim 15 wherein:

~~said first disc defines a third and fourth slot;~~

a [[third]] fifth and ~~fourth~~ sixth pin are mounted to said second disc; and

rotation of said first [[and]], second and third discs with respect to said housing causes said [[third]] fifth pin to engage said third slot to define a [[third]] fifth compression chamber between said [[third]] fifth pin and said first disc, and said ~~fourth~~ sixth pin to engage said fourth slot to define a ~~fourth~~ sixth compression chamber between said ~~fourth~~ sixth pin and said first disc.

30. (original) The apparatus according to Claim 29 wherein said first and second slots are disposed opposite to each other and said third and fourth slots are

disposed opposite to each other.

31. (original) The apparatus according to Claim 29 further comprising:

a first trap plate on a first side of said first disc; and

a second trap plate disposed on a second side of said first disc, said first and second trap plates sealing said compression chambers when a respective pin engages a respective slot.

32. (original) The apparatus according to Claim 29 wherein said first disc defines a first tunnel in communication with said first and second slots and a second tunnel in communication with said third and fourth slots.

33. (original) The apparatus according to Claim 32 further comprising a first fuel injector disposed within said first tunnel and a second fuel injector disposed within said second tunnel.

34. (original) The apparatus according to Claim 33 wherein said first and second fuel injectors are disposed along an axis of rotation of said first disc on opposite sides of said first disc.

35. (original) The apparatus according to Claim 33 wherein said first and second fuel injectors are rotatably disposed with respect to said first disc.

36. (original) The apparatus according to Claim 33 wherein each fuel injector is movable between a first position and second position, each fuel injector spraying fuel to a first location when in said first position and each fuel injector spraying fuel to a second location when in said second position, said second position being different than said first position.

37. (original) The apparatus according to Claim 33 wherein each combustion chamber is in communication with a spark initiator.

38. (currently amended) The apparatus according to Claim 29 further comprising a first fuel injector in simultaneous communication with said first and second compression chambers, and a second fuel injector in simultaneous communication with said third and fourth compression chambers.

39. (original) The apparatus according to Claim 38 wherein each combustion chamber is in communication with a spark initiator.

40. (original) The apparatus according to Claim 29 wherein each combustion chamber is in communication with a spark initiator.

41. (currently amended) The apparatus according to Claim [[13]] 15 wherein each of said first and second pins comprise a porous metal pin.

42. (currently amended) An internal combustion engine comprising:

a housing defining a single combustion chamber;

a fuel injector rotatably disposed with respect to said housing and in communication with said combustion chamber, said fuel injector being movable rotatively between a first and a second position, said fuel injector spraying fuel to a first location when in said first position, and said fuel injector spraying fuel to a second location when in said second position, said second position being different than said first position.

43. (currently amended) A single piece piston for an engine, said piston comprising:

a body comprised entirely of a porous metal; and

a cavity defined by said body.